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November 30, 2018

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

Re: **Duke Energy Progress, LLC – Monthly Power Plant Performance
Report
Docket No. 2006-224-E**

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is the Monthly Power Plant Performance Report in Docket No. 2006-224-E for the month of October 2018.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803.988.7130.

Sincerely,

Rebecca J. Dulin

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff
Mr. Jeffrey M. Nelson, Office of Regulatory Staff
Ms. Nanette Edwards, Office of Regulatory Staff
Michael Seaman-Huynh, Office of Regulatory Staff
Ms. Heather Shirley Smith, Duke Energy
Mr. Scott Elliott, Elliott & Elliott, P.A.
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC
Mr. Gary Walsh, Walsh Consulting, LLC

**Duke Energy Progress
Base Load Power Plant Performance Review Plan**

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Period: October, 2018

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Brunswick	1	None					
	2	None					
Harris	1	None					
Robinson	2	09/22/2018 - 10/29/2018	674.10	Scheduled	End-of-cycle 31 refueling outage (R231)	Planned refueling outage	Completed refueling outage
	2	10/29/2018 - 11/01/2018	69.90	Scheduled	Outage extended 2.91 days due to ongoing transmission project	Transmission upgrade project work taking longer than scheduled	Continued transmission upgrade project work

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
October 2018**

Lee Energy Complex

No Outages at Baseload Units During the Month.

Richmond County Station

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
7	10/13/2018 12:25:00 AM To 10/19/2018 12:12:00 AM	Sch	3999	Other Miscellaneous Balance Of Plant Problems	BOP outage.	
7	10/19/2018 1:25:00 AM To 10/19/2018 9:40:00 AM	Sch	6174	IP Startup bypass instrumentation and controls	Dump tube transmitter calibrated incorrectly.	
8	10/19/2018 2:23:00 PM To 10/25/2018 11:11:00 PM	Sch	3999	Other Miscellaneous Balance Of Plant Problems	BOP outage.	

Sutton Energy Complex

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
1A	9/21/2018 12:23:00 AM To 10/15/2018 5:05:00 PM	Unsch	9000	Flood	Plant shutdown due to post hurricane flooding.	
1A	10/26/2018 12:12:00 AM To 10/29/2018 9:15:00 AM	Sch	9320	Other Miscellaneous External Problems	Maintenance off-line for gas piping clean-out.	
1A	10/30/2018 11:23:00 AM To 10/31/2018 11:30:00 AM	Sch	5246	Gas Turbine Control System - Hardware Problem	Off line to remove SFC CPU to use on 01B CT for testing.	
1B	9/21/2018 12:23:00 AM To 10/15/2018 3:36:00 PM	Unsch	9000	Flood	Plant shutdown due to post hurricane flooding.	
1B	10/15/2018 4:09:00 PM To 10/15/2018 4:13:00 PM	Unsch	5075	Blade Path Temperature Spread	Blade path increased to trip unit above 40 megawatts.	
1B	10/15/2018 5:51:00 PM To 10/30/2018 3:57:00 PM	Sch	5075	Blade Path Temperature Spread	Blade path spread, unit retired to inspect/clean nozzles.	
ST1	9/21/2018 12:16:00 AM To 11/1/2018 12:00:00 AM	Unsch	9000	Flood	Plant shutdown due to post hurricane flooding.	

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Base Load Power Plant Performance Review Plan

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October 2018
Brunswick Nuclear Station

	<u>Unit 1</u>	<u>Unit 2</u>		
(A) MDC (mW)	938	932		
(B) Period Hours	744	744		
(C) Net Gen (mWh) and Capacity Factor (%)	709,004	101.60	674,267	97.24
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	3,336	0.48	139	0.02
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-14,468	-2.08	19,002	2.74
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	697,872	100.00%	693,408	100.00%
(K) Equivalent Availability (%)		99.52		99.96
(L) Output Factor (%)		101.60		97.24
(M) Heat Rate (BTU/NkWh)		10,389		10,732

* Estimate

FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

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October 2018
Harris Nuclear Station

Unit 1

(A) MDC (mW)	932	
(B) Period Hours	744	
(C) Net Gen (mWh) and Capacity Factor (%)	733,607	105.80
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	211	0.03
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-40,410	-5.83
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	693,408	100.00%
(K) Equivalent Availability (%)		99.97
(L) Output Factor (%)		105.80
(M) Heat Rate (BTU/NkWh)		10,178

* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress
Base Load Power Plant Performance Review Plan**

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**October 2018
Robinson Nuclear Station**

Unit 2

(A) MDC (mW)	741	
(B) Period Hours	744	
(C) Net Gen (mWh) and Capacity Factor (%)	-2,024	-0.37
(D) Net mWh Not Gen due to Full Schedule Outages	551,304	100.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	2,024	0.37
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	0	0.00
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	551,304	100.00%
(K) Equivalent Availability (%)		0.00
(L) Output Factor (%)		0.00
(M) Heat Rate (BTU/NkWh)		0

* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
October 2018**

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	744	744	744	744	744
(C) Net Generation (mWh)	136,287	134,076	137,132	274,522	682,017
(D) Capacity Factor (%)	81.41	79.39	80.84	97.36	86.56
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	20,460	21,204	21,576	372	63,612
(H) Scheduled Derates: percent of Period Hrs	12.22	12.56	12.72	0.13	8.07
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	10,653	13,608	10,924	7,082	42,267
(N) Economic Dispatch: percent of Period Hrs	6.36	8.06	6.44	2.51	5.36
(O) Net mWh Possible in Period	167,400	168,888	169,632	281,976	787,896
(P) Equivalent Availability (%)	87.78	87.44	87.28	99.87	91.93
(Q) Output Factor (%)	81.95	80.34	81.42	98.31	87.34
(R) Heat Rate (BTU/NkWh)	8,676	8,749	8,650	5,118	7,253

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
October 2018**

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	92,811	92,369	102,507	287,687
(D) Capacity Factor (%)	66.00	65.69	78.73	69.92
(E) Net mWh Not Generated due to Full Scheduled Outages	28,734	28,879	0	57,614
(F) Scheduled Outages: percent of Period Hrs	20.43	20.54	0.00	14.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	10,359	10,642	29,470	50,472
(H) Scheduled Derates: percent of Period Hrs	7.37	7.57	22.63	12.27
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	8,711	8,726	0	17,437
(N) Economic Dispatch: percent of Period Hrs	6.20	6.21	0.00	4.24
(O) Net mWh Possible in Period	140,616	140,616	130,200	411,432
(P) Equivalent Availability (%)	72.20	71.89	77.37	73.73
(Q) Output Factor (%)	82.95	82.67	78.73	81.31
(R) Heat Rate (BTU/NkWh)	11,425	11,148	0	7,265

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
October 2018**

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	680
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	134,237	135,328	176,621	446,186
(D) Capacity Factor (%)	83.53	84.21	95.72	88.19
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	15,624	15,252	0	30,876
(H) Scheduled Derates: percent of Period Hrs	9.72	9.49	0.00	6.10
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	10,843	10,124	7,891	28,858
(N) Economic Dispatch: percent of Period Hrs	6.75	6.30	4.28	5.70
(O) Net mWh Possible in Period	160,704	160,704	184,512	505,920
(P) Equivalent Availability (%)	90.28	90.51	100.00	93.90
(Q) Output Factor (%)	83.53	84.21	95.72	88.19
(R) Heat Rate (BTU/NkWh)	11,287	11,161	0	6,781

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
October 2018**

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	21,020	3,340	-195	24,165
(D) Capacity Factor (%)	12.61	2.00	0.00	4.52
(E) Net mWh Not Generated due to Full Scheduled Outages	23,557	80,214	0	103,772
(F) Scheduled Outages: percent of Period Hrs	14.14	48.13	0.00	19.40
(G) Net mWh Not Generated due to Partial Scheduled Outages	7,715	542	0	8,258
(H) Scheduled Derates: percent of Period Hrs	4.63	0.33	0.00	1.54
(I) Net mWh Not Generated due to Full Forced Outages	79,091	81,857	201,624	362,572
(J) Forced Outages: percent of Period Hrs	47.46	49.12	100.00	67.78
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	35,273	702	0	35,975
(N) Economic Dispatch: percent of Period Hrs	21.17	0.42	0.00	6.73
(O) Net mWh Possible in Period	166,656	166,656	201,624	534,936
(P) Equivalent Availability (%)	33.78	2.43	0.00	11.28
(Q) Output Factor (%)	67.24	72.85	0.00	67.41
(R) Heat Rate (BTU/NkWh)	10,498	17,919	0	11,608

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
October 2018**

Mayo Station

Unit 1

(A)	MDC (mW)	746
(B)	Period Hrs	744
(C)	Net Generation (mWh)	-3,711
(D)	Net mWh Possible in Period	555,024
(E)	Equivalent Availability (%)	0.00
(F)	Output Factor (%)	0.00
(G)	Capacity Factor (%)	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
October 2018**

	Roxboro Station		
	Unit 2	Unit 3	Unit 4
(A) MDC (mW)	673	698	711
(B) Period Hrs	744	744	744
(C) Net Generation (mWh)	25,935	-2,241	173,969
(D) Net mWh Possible in Period	500,712	519,312	528,984
(E) Equivalent Availability (%)	16.21	0.00	54.68
(F) Output Factor (%)	31.81	0.00	61.00
(G) Capacity Factor (%)	5.18	0.00	32.89

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Base Load Power Plant Performance Review Plan

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November 2017 - October 2018
Brunswick Nuclear Station

	<u>Unit 1</u>	<u>Unit 2</u>		
(A) MDC (mW)	938	932		
(B) Period Hours	8760	8760		
(C) Net Gen (mWh) and Capacity Factor (%)	7,075,795	86.11	7,573,071	92.76
(D) Net mWh Not Gen due to Full Schedule Outages	733,172	8.92	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	114,074	1.39	45,702	0.56
(F) Net mWh Not Gen due to Full Forced Outages	256,700	3.12	285,985	3.50
* (G) Net mWh Not Gen due to Partial Forced Outages	37,139	0.46	259,562	3.18
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	8,216,880	100.00%	8,164,320	100.00%
(K) Equivalent Availability (%)		86.60		93.82
(L) Output Factor (%)		97.91		96.13
(M) Heat Rate (BTU/NkWh)		10,453		10,764

* Estimate
 FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

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November 2017 - October 2018
Harris Nuclear Station

Unit 1

(A) MDC (mW)	932	
(B) Period Hours	8760	
(C) Net Gen (mWh) and Capacity Factor (%)	7,541,199	92.43
(D) Net mWh Not Gen due to Full Schedule Outages	756,318	9.27
* (E) Net mWh Not Gen due to Partial Scheduled Outages	20,006	0.25
(F) Net mWh Not Gen due to Full Forced Outages	97,689	1.20
* (G) Net mWh Not Gen due to Partial Forced Outages	-256,752	-3.15
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	8,158,460	100.00%
(K) Equivalent Availability (%)		89.02
(L) Output Factor (%)		103.23
(M) Heat Rate (BTU/NkWh)		10,424

* Estimate

FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

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November 2017 - October 2018
Robinson Nuclear Station

Unit 2

(A) MDC (mW)	741	
(B) Period Hours	8760	
(C) Net Gen (mWh) and Capacity Factor (%)	5,847,816	90.09
(D) Net mWh Not Gen due to Full Schedule Outages	839,726	12.94
* (E) Net mWh Not Gen due to Partial Scheduled Outages	30,182	0.46
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-226,564	-3.49
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	6,491,160	100.00%
(K) Equivalent Availability (%)		86.74
(L) Output Factor (%)		103.47
(M) Heat Rate (BTU/NkWh)		10,382

* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
November, 2017 through October, 2018**

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	226	227	379	1,057
(B) Period Hrs	8,760	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,464,509	1,462,102	1,485,989	2,901,228	7,313,828
(D) Capacity Factor (%)	74.41	73.80	74.67	87.39	78.99
(E) Net mWh Not Generated due to Full Scheduled Outages	73,316	73,669	74,054	132,069	353,109
(F) Scheduled Outages: percent of Period Hrs	3.73	3.72	3.72	3.98	3.81
(G) Net mWh Not Generated due to Partial Scheduled Outages	270,457	281,391	286,299	22,437	860,583
(H) Scheduled Derates: percent of Period Hrs	13.74	14.20	14.39	0.68	9.29
(I) Net mWh Not Generated due to Full Forced Outages	9,577	4,147	3,089	17,030	33,842
(J) Forced Outages: percent of Period Hrs	0.49	0.21	0.16	0.51	0.37
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	10,247	10,247
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.31	0.11
(M) Net mWh Not Generated due to Economic Dispatch	150,210	159,887	140,524	237,030	687,651
(N) Economic Dispatch: percent of Period Hrs	7.63	8.07	7.06	7.14	7.43
(O) Net mWh Possible in Period	1,968,070	1,981,195	1,989,955	3,320,040	9,259,260
(P) Equivalent Availability (%)	82.06	81.91	81.78	94.52	86.42
(Q) Output Factor (%)	78.25	77.28	78.04	91.94	82.89
(R) Heat Rate (BTU/NkWh)	9,064	9,117	9,027	4,498	7,256

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
November, 2017 through October, 2018**

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,222,399	1,216,961	1,362,817	3,802,177
(D) Capacity Factor (%)	73.83	73.50	88.90	78.49
(E) Net mWh Not Generated due to Full Scheduled Outages	153,207	153,437	116,973	423,616
(F) Scheduled Outages: percent of Period Hrs	9.25	9.27	7.63	8.74
(G) Net mWh Not Generated due to Partial Scheduled Outages	165,496	170,132	56,049	391,677
(H) Scheduled Derates: percent of Period Hrs	10.00	10.28	3.66	8.09
(I) Net mWh Not Generated due to Full Forced Outages	422	794	0	1,216
(J) Forced Outages: percent of Period Hrs	0.03	0.05	0.00	0.03
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	583	583
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.04	0.01
(M) Net mWh Not Generated due to Economic Dispatch	114,116	114,317	0	225,010
(N) Economic Dispatch: percent of Period Hrs	6.89	6.90	0.00	4.64
(O) Net mWh Possible in Period	1,655,640	1,655,640	1,533,000	4,844,280
(P) Equivalent Availability (%)	80.72	80.41	88.68	83.13
(Q) Output Factor (%)	81.59	81.51	96.56	86.36
(R) Heat Rate (BTU/NkWh)	11,343	11,132	0	7,210

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
November, 2017 through October, 2018**

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	679
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,479,236	1,491,181	1,963,034	4,933,451
(D) Capacity Factor (%)	78.30	78.93	90.36	82.90
(E) Net mWh Not Generated due to Full Scheduled Outages	105,660	105,516	125,182	336,358
(F) Scheduled Outages: percent of Period Hrs	5.59	5.59	5.76	5.65
(G) Net mWh Not Generated due to Partial Scheduled Outages	204,112	199,814	2,209	406,136
(H) Scheduled Derates: percent of Period Hrs	10.80	10.58	0.10	6.82
(I) Net mWh Not Generated due to Full Forced Outages	5,167	277	0	5,444
(J) Forced Outages: percent of Period Hrs	0.27	0.01	0.00	0.09
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	1,582	1,582
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.07	0.03
(M) Net mWh Not Generated due to Economic Dispatch	95,055	92,441	80,472	267,969
(N) Economic Dispatch: percent of Period Hrs	5.03	4.89	3.70	4.50
(O) Net mWh Possible in Period	1,889,230	1,889,230	2,172,480	5,950,940
(P) Equivalent Availability (%)	83.35	83.84	94.06	87.41
(Q) Output Factor (%)	83.73	83.67	95.88	88.16
(R) Heat Rate (BTU/NkWh)	11,334	11,306	0	6,816

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
November, 2017 through October, 2018**

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	270	719
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,201,700	1,228,950	1,433,400	3,864,050
(D) Capacity Factor (%)	61.20	62.58	60.53	61.38
(E) Net mWh Not Generated due to Full Scheduled Outages	245,078	267,127	252,956	765,162
(F) Scheduled Outages: percent of Period Hrs	12.48	13.60	10.68	12.15
(G) Net mWh Not Generated due to Partial Scheduled Outages	221,432	208,121	45,908	475,460
(H) Scheduled Derates: percent of Period Hrs	11.28	10.60	1.94	7.55
(I) Net mWh Not Generated due to Full Forced Outages	132,765	135,744	306,727	575,236
(J) Forced Outages: percent of Period Hrs	6.76	6.91	12.95	9.14
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	16,823	16,823
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.71	0.27
(M) Net mWh Not Generated due to Economic Dispatch	162,730	123,763	312,287	598,779
(N) Economic Dispatch: percent of Period Hrs	8.29	6.30	13.19	9.51
(O) Net mWh Possible in Period	1,963,705	1,963,705	2,368,100	6,295,510
(P) Equivalent Availability (%)	69.46	68.87	73.78	70.89
(Q) Output Factor (%)	78.63	79.67	79.33	79.22
(R) Heat Rate (BTU/NkWh)	11,412	11,375	0	7,167

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Intermediate Power Plant
Performance Review Plan
November, 2017 through October, 2018**

Mayo Station

Units	Unit 1
(A) MDC (mW)	746
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,458,740
(D) Net mWh Possible in Period	6,534,960
(E) Equivalent Availability (%)	79.76
(F) Output Factor (%)	40.97
(G) Capacity Factor (%)	22.32

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Intermediate Power Plant
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November, 2017 through October, 2018**

Roxboro Station

Units	Unit 2	Unit 3	Unit 4
(A) MDC (mW)	673	698	711
(B) Period Hrs	8,760	8,760	8,760
(C) Net Generation (mWh)	1,788,472	1,709,129	1,629,177
(D) Net mWh Possible in Period	5,895,480	6,114,480	6,228,360
(E) Equivalent Availability (%)	76.42	67.87	53.68
(F) Output Factor (%)	51.02	50.09	56.21
(G) Capacity Factor (%)	30.34	27.95	26.16

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Outages for 100 mW or Larger Units
October, 2018

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<u>Unit Name</u>	<u>Capacity Rating (mW)</u>	<u>Full Outage Hours</u>		<u>Total</u>
		<u>Scheduled</u>	<u>Unscheduled</u>	
Brunswick 1	938	0.00	0.00	0.00
Brunswick 2	932	0.00	0.00	0.00
Harris 1	932	0.00	0.00	0.00
Robinson 2	741	744.00	0.00	744.00

Duke Energy Progress
Outages for 100 mW or Larger Units
October 2018

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Asheville Steam 1	192	0.00	0.25	0.25
Asheville Steam 2	192	0.00	0.00	0.00
Asheville CT 3	185	713.87	0.00	713.87
Asheville CT 4	185	741.00	0.00	741.00
Darlington CT 12	133	114.00	0.00	114.00
Darlington CT 13	133	65.63	26.43	92.07
Lee Energy Complex CC 1A	225	0.00	0.00	0.00
Lee Energy Complex CC 1B	227	0.00	0.00	0.00
Lee Energy Complex CC 1C	228	0.00	0.00	0.00
Lee Energy Complex CC ST1	379	0.00	0.00	0.00
Mayo Steam 1	746	744.00	0.00	744.00
Richmond County CT 1	189	0.00	0.00	0.00
Richmond County CT 2	187	0.00	0.00	0.00
Richmond County CT 3	185	120.68	0.00	120.68
Richmond County CT 4	186	363.72	0.00	363.72
Richmond County CT 6	187	0.00	0.00	0.00
Richmond County CC 7	189	152.03	0.00	152.03
Richmond County CC 8	189	152.80	0.00	152.80
Richmond County CC ST4	175	0.00	0.00	0.00
Richmond County CC 9	216	0.00	0.00	0.00
Richmond County CC 10	216	0.00	0.00	0.00
Richmond County CC ST5	248	0.00	0.00	0.00

Notes:

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Duke Energy Progress
Outages for 100 mW or Larger Units
October 2018

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Roxboro Steam 1	380	0.00	22.87	22.87
Roxboro Steam 2	673	622.87	0.00	622.87
Roxboro Steam 3	698	744.00	0.00	744.00
Roxboro Steam 4	711	337.18	0.00	337.18
Sutton Energy Complex CC 1A	224	105.17	353.08	458.25
Sutton Energy Complex CC 1B	224	358.10	365.43	723.53
Sutton Energy Complex CC ST1	271	0.00	744.00	744.00
Wayne County CT 10	192	103.00	0.28	103.28
Wayne County CT 11	192	0.00	1.62	1.62
Wayne County CT 12	193	0.00	0.00	0.00
Wayne County CT 13	191	99.88	0.00	99.88
Wayne County CT 14	195	137.00	0.00	137.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.